

Notice of Allowability

Application No.

10/506,623

Examiner

Andrew Wendell

Applicant(s)

NAWATA, HIZURU

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/23/2006.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: The prior art of record, Tsutomu (JP 07-123039) teaches a transmission device T (Drawing 1) including information amount magnitude discrimination means 102 (Drawing 1) for discriminating whether an amount of information to be transmitted per unit time is dependent on traffic, first communication data sending means T (Drawing 1) for, when the information amount magnitude discrimination means 102 (Drawing 1) discriminates that the amount of information to be transmitted is relatively heavy (higher value from $n \times R$), digitally modulating 103 (Drawing 1) first information as the information into information in a signal form having a predetermined bandwidth with a predetermined center frequency, and sending out the information as communication data (Sections 0004, 0006, 0009-0010), and second communication data sending means T (Drawing 1), digitally modulating second information as the information upon performing spread spectrum (digital signals) or another communication method to obtain the same bandwidth as the predetermined bandwidth with the center frequency, and sending out the information as the communication data (Sections 0004, 0006, 0009-0010), and a reception device R (Drawing 1) including demodulation means 105 (Drawing 1) for demodulating the communication data sent from the transmission device, de-spreading (digital signal) appropriateness discrimination means for checking whether or not a signal after demodulation can be normally de-spread (Sections 0006, 0011-0012), first information reproduction means for, when the de-spreading appropriateness

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discrimination means discriminates that de-spreading cannot be normally performed (value of n from sign rate nxR), reproducing the first information from the signal after demodulation by the demodulation means (Sections 0006, 0011-0012), de-spreading means for, when the de-spreading appropriateness discrimination means discriminates that de-spreading can be normally performed (different value of n from sign rate nxR), de-spreading the signal after demodulation by the demodulation means, and second information reproduction means for reproducing the second information from the signal after de-spreading by the de-spreading means (Sections 0006, 0011-0012). Tsutomu fails to teach the size of the information (large or small) changing the transmission method and clearly teaching transmitting for small information spread spectrum or for the receiving device de-spreading means.

Zehavi (US Pat Appl# 2003/0053432) teaches digitally modulating second information as the information upon performing spread spectrum (CDMA, Section 0061, the system is transmitting in a CDMA network) to obtain the same bandwidth as the predetermined bandwidth with the center frequency, and sending out the information as the communication data, and a reception device including demodulation means for demodulating the communication data sent from the transmission device (Page 7, Claim 1), de-spreading appropriateness discrimination means for checking whether or not a signal after demodulation can be normally de-spread (CDMA, Section 0053, the system is receiving in a CDMA network, and Page 7, Claim 1).

The prior art of record fails to teach a variable communication system characterized by comprising: a transmission device including information amount

magnitude discrimination means for discriminating whether an amount of information to be transmitted per unit time is greater than or less than a threshold amount, first communication data sending means for, when the information amount magnitude discrimination means discriminates that the amount of information to be transmitted is a first amount, digitally modulating first information as the information into information in a signal form having a predetermined bandwidth with a predetermined center frequency, and sending out the information as communication data, and second communication data sending means for, when the information amount magnitude discrimination means discriminates that the amount of information to be transmitted is a second amount, digitally modulating second information as the information upon performing spread spectrum to obtain the same bandwidth as the predetermined bandwidth with the center frequency, and sending out the information as the communication data, and a reception device including demodulation means for demodulating the communication data sent from the transmission device, de-spreading appropriateness discrimination means for checking whether or not a signal after demodulation can be normally de-spread, first information reproduction means for, when the de-spreading appropriateness discrimination means discriminates that de-spreading cannot be normally performed, reproducing the first information from the signal after demodulation by the demodulation means, de-spreading means for, when the de-spreading appropriateness discrimination means discriminates that de-spreading can be normally performed, de-spreading the signal after demodulation by the demodulation means, and second information reproduction means for reproducing

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the second information from the signal after de-spreading by the de-spreading means, and wherein the first amount is greater than the threshold amount and the second amount is less than a threshold amount.

As applicant remark "Neither alone, nor in combination, do Tsutmo and Zehavi teach or suggest changing the transmission method based on an amount of discriminated data and further the same fail to teach or suggest second communication data sending means for, when the information amount magnitude discrimination means discriminates that the amount of information to be transmitted is a second amount wherein the second amount is less than a threshold amount." Examiner agrees with argument and the remarks overcome the prior art of record.

The prior art of record fails to teach the claimed subject matter as claimed and substantially connected in claims 1-12.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Wendell whose telephone number is 571-272-0557. The examiner can normally be reached on 7:30-5 M-F.

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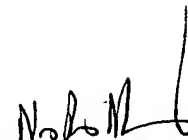
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Andrew Wendell
Examiner
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6/9/2006



NAY MAUNG
SUPERVISORY PATENT EXAMINER